

Applicants: Elena Feinstein, et al.
Serial No.: 10/575,121
Filed: October 6, 2004
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Amendments to the Claims:

Pursuant to 37 C.F.R. §1.121(c), this listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

- 1-25. (Canceled)
26. (Previously presented) A double stranded oligoribonucleotide, wherein one strand comprises consecutive nucleotides having, from 5' to 3', the sequence set forth in any of SEQ ID NOS:25-45 or SEQ ID NO:67 or a homolog thereof and wherein a base is altered in up to 2 of the nucleotides in each terminal region.
27. (Previously presented) A vector comprising an oligoribonucleotide of claim 26.
28. (Previously presented) A composition comprising an oligoribonucleotide of claim 26.
29. (Previously presented) A composition comprising a vector of claim 27.
30. (Previously presented) A method of treating a neurodegenerative disease in a subject which comprises administering to the subject a therapeutically effective amount of a pharmaceutical composition comprising a BMP2A inhibitor so as to thereby treat the subject.
31. (Previously Presented) The method of claim 30, wherein the pharmaceutical composition comprises an oligoribonucleotide which down regulates the expression of the BMP2A gene by at least 50% as compared to a control.
32. (Previously presented) The method of claim 30, wherein the BMP2A

inhibitor is an antisense oligonucleotide.

33. (Previously presented) The method of claim 30, wherein the BMP2A inhibitor is a BMP2A siRNA.
34. (Previously presented) The method of claim 33, wherein the siRNA is a double stranded oligoribonucleotide wherein one strand comprises consecutive nucleotides having, from 5' to 3', the sequence set forth in any of SEQ ID NOS:25-45 or SEQ ID NO:67 or a homolog thereof and wherein a base is altered in up to 2 of the nucleotides in each terminal region.
35. (Currently amended) The method of claim 33, wherein the siRNA has a sequence selected from the group SEQ ID NOS:1-2, 4-6, 14-16, and 18-22 ~~which are set forth in Table 1.~~
36. (Previously presented) The method of claim 30, wherein the disease is a stroke.
37. (Previously presented) An oligonucleotide comprising consecutive nucleotides, the sequence of which is set forth in any of SEQ ID NOS:3-45 or SEQ ID NO:67.
38. (Previously presented) A vector comprising an oligonucleotide of claim 37.
39. (Previously presented) A pharmaceutical composition comprising an oligonucleotide of claim 37 and a pharmaceutically acceptable carrier.
40. (Previously presented) A pharmaceutical composition comprising a vector of claim 37 and a pharmaceutically acceptable carrier.
41. (Previously presented) The method of claim 31, wherein the disease is a stroke.

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42. (Previously presented) The method of claim 32, wherein the disease is a stroke.
43. (Previously presented) The method of claim 33, wherein the disease is a stroke.
44. (Previously presented) The method of claim 34, wherein the disease is a stroke.
45. (Previously presented) The method of claim 35, wherein the disease is a stroke.